DVP-S533D

RMT-D108A

SERVICE MANUAL

PX Model

Self Diagnosis Supported model

SPECIFICATIONS

CD/DVD player

Laser Semiconductor laser
Signal format system NTSC

Audio characteristics

Frequency response DVD (PCM 96 kHz): 2 Hz to 44 kHz (±1 dB)*
DVD (PCM 48 kHz): 2 Hz to 22 kHz (±0.5 dB)
CD: 2 Hz to 20 kHz (±0.5 dB)
Signal-to-noise ratio More than 115 dB (LINE OUT (AUDIO 1, 2) connectors only)
Harmonic distortion Less than 0.0025%
Dynamic range More than 100 dB (DVD)
More than 97 dB (CD)
Wow and flutter Less than detected value (±0.001% W PEAK)

Outputs and inputs

	Jack type	Output level	Load impedance
LINE OUT (AUDIO 1, 2)	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
DIGITAL OUT (OPTICAL)	Optical output connector	–18 dBm	Wave length: 660 nm
DIGITAL OUT (COAXIAL)	Phono jack	0.5 Vp-p	75 ohms terminated
LINE OUT (VIDEO 1, 2)	Phono jacks	1.0 Vp-p	75 ohms, sync negative
S VIDEO OUT (1, 2)	4-pin mini DIN	Y: 1.0 Vp-p C: 0.286 Vp-p	75 ohms, sync negative 75 ohms terminated
COMPONENT VIDEO OUT (Y, P_B/B-Y, P_R/R-Y)	phono jacks	Y: 1.0 Vp-p P_B/B-Y, P_R/R-Y: 0.7 Vp-p	75 ohms, sync negative 75 ohms
PHONES	Phone jack	12 mW	32 ohms
5.1CH OUTPUT	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms

General

Power requirements 110 to 240 V AC, 50/60 Hz
Power consumption 16 W
Dimensions (approx.) 430 × 95 × 305 mm ($17 \times 3^{3}/_{4} \times 12$ in.) (w/h/d) incl. projecting parts
Mass (approx.) 3.4 kg (7 lb 8 oz)
Operating temperature 41°F to 95°F (5°C to 35°C)
Operating humidity 5% to 90%

Supplied accessories

- Audio/Video/S-link connecting cord (1)
- S video cable (1)
- Plug adaptor (1)
- Remote commander (remote) RMT-D108A (1)
- Size AA (R6) batteries (2)

* The signals from LINE OUT (AUDIO 1, 2) connectors and 5.1 ch L, R connectors are measured. When you play the PCM sound tracks with 96 kHz sampling frequency, the output signals from the DIGITAL OUT (OPTICAL, COAXIAL) are converted to 48 kHz (sampling frequency).

Design and specifications are subject to change without notice.

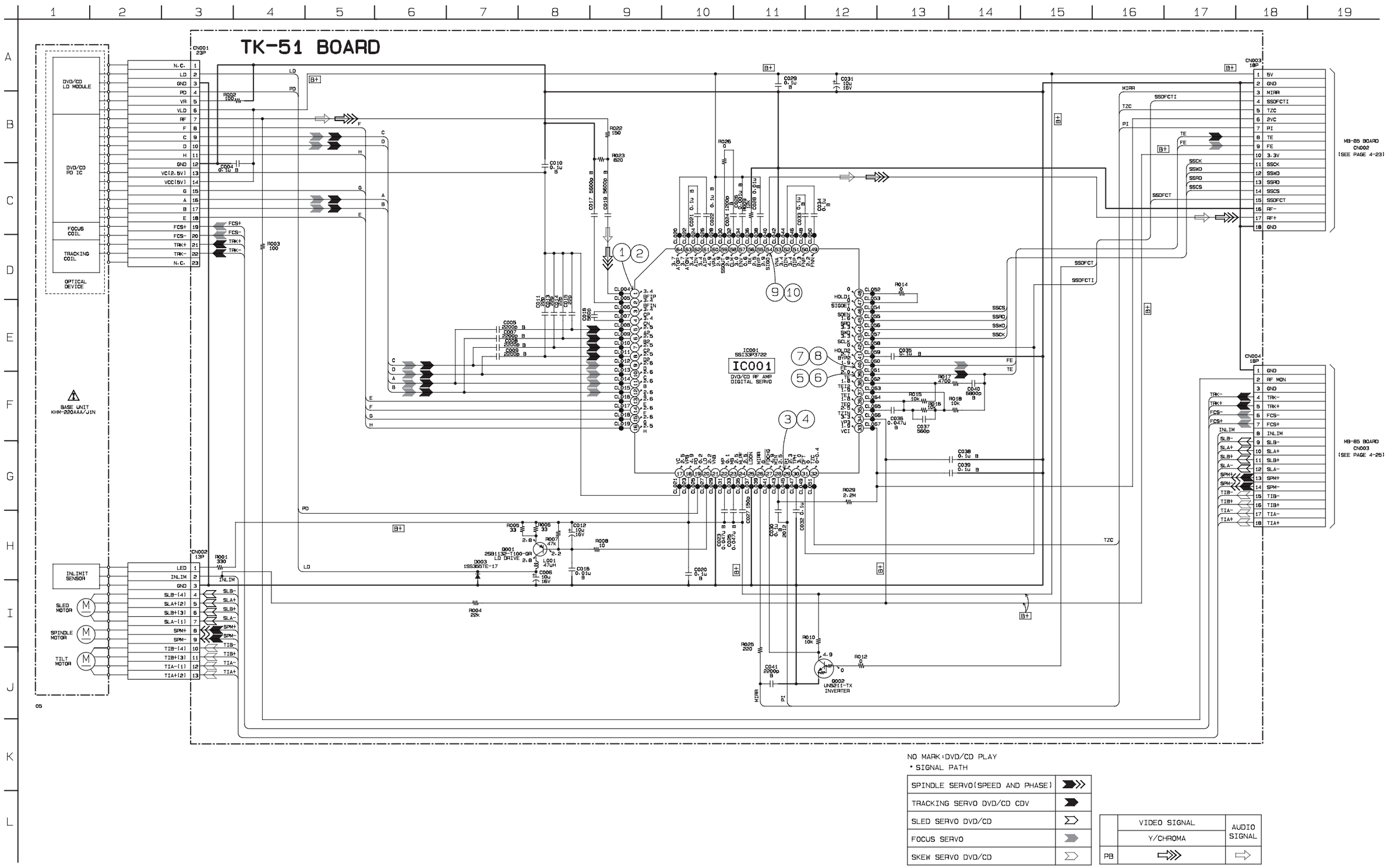
DVD VIDEO COMPACT disc DIGITAL VIDEO **CD/DVD PLAYER**

MICROFILM

SONY®

TK-51 (RF/SERVO) SCHEMATIC DIAGRAM • **See page 4-7 for printed wiring board and page 4-10 for waveforms.**

– Ref. No.: TK-51 board; 2,000 series –

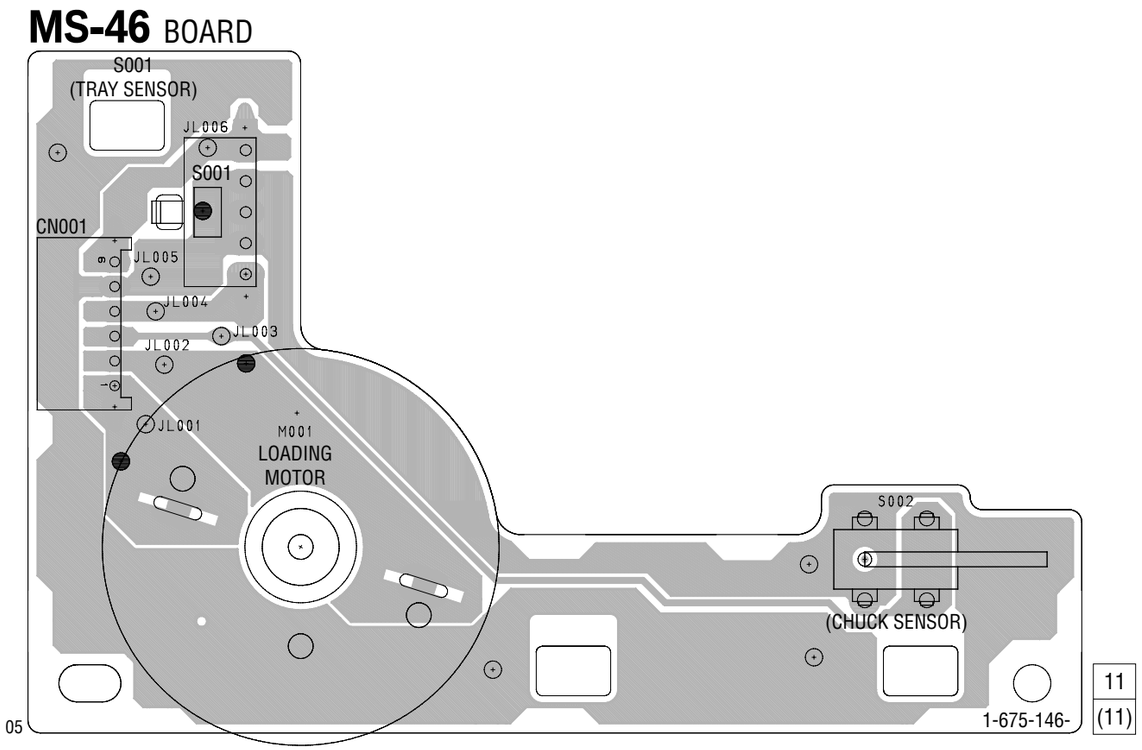


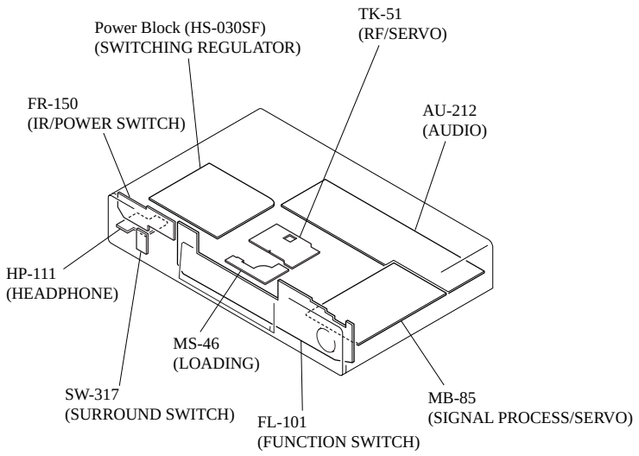
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

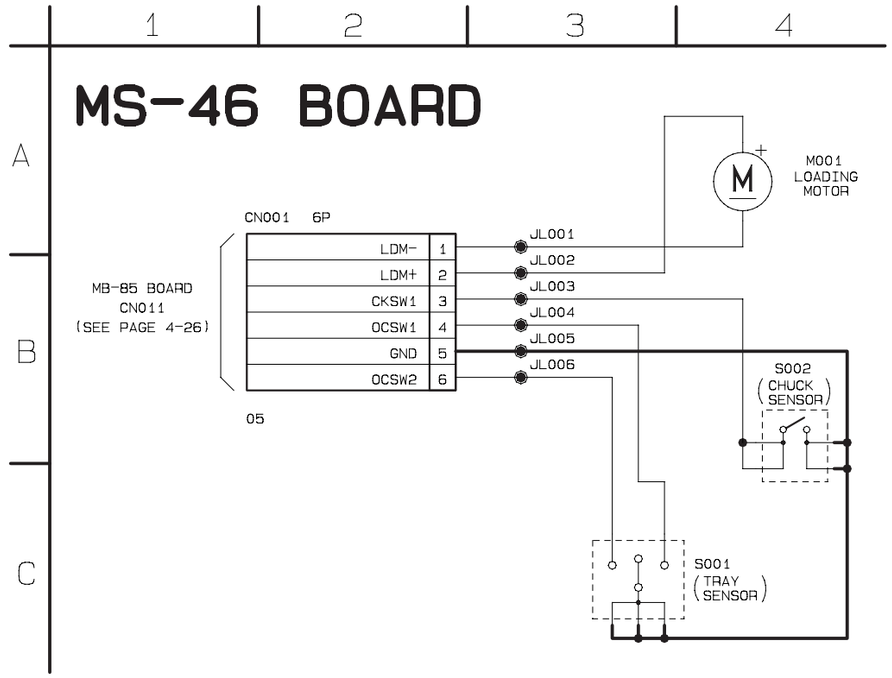
MS-46 (LOADING) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

– Ref. No.: MS-46 board; 3,000 series –

There are few cases that the part isn't mounted in this model is printed on this diagram.

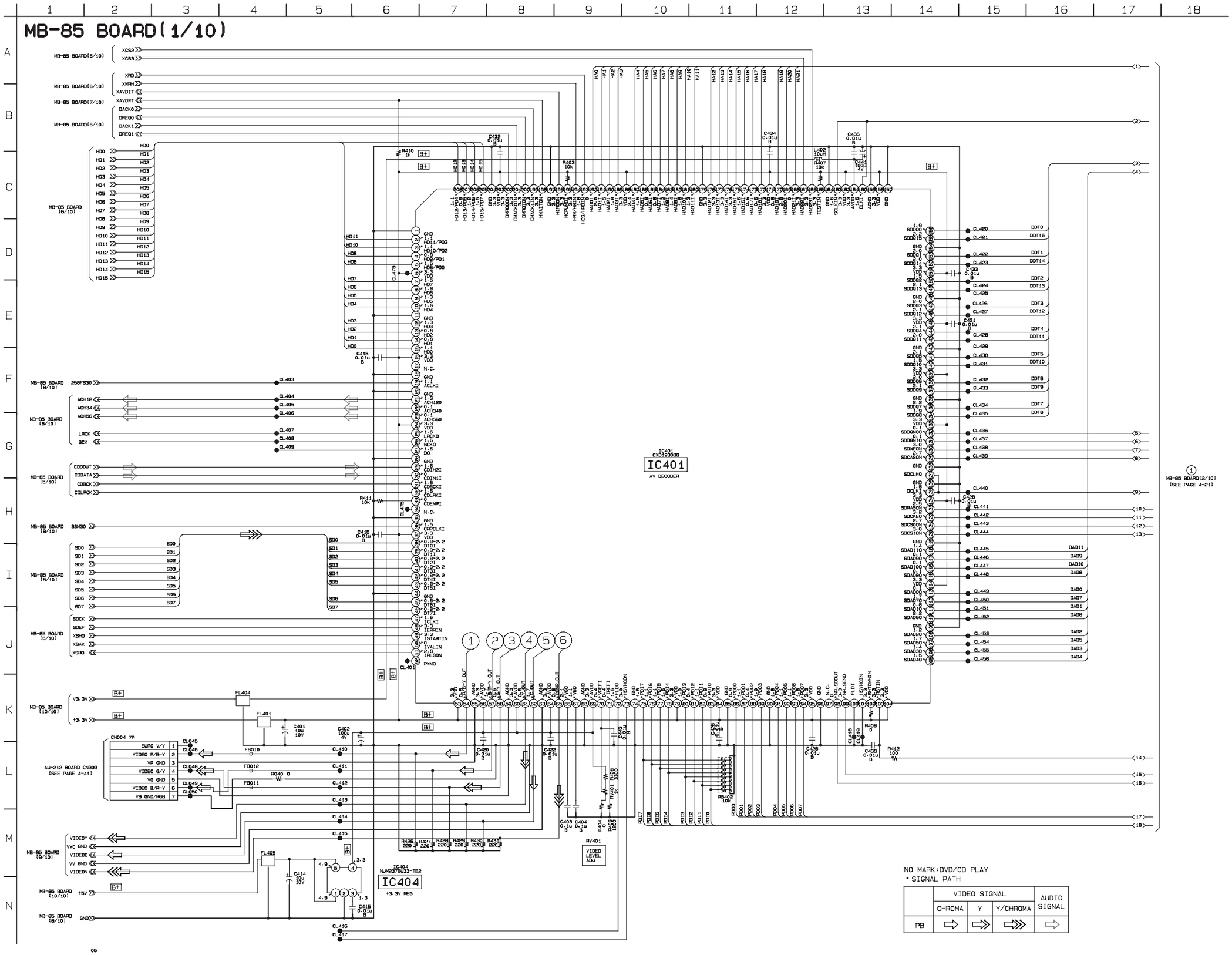






MB-85 (AV DECODER) SCHEMATIC DIAGRAM **• See page 4-15 for printed wiring board.**

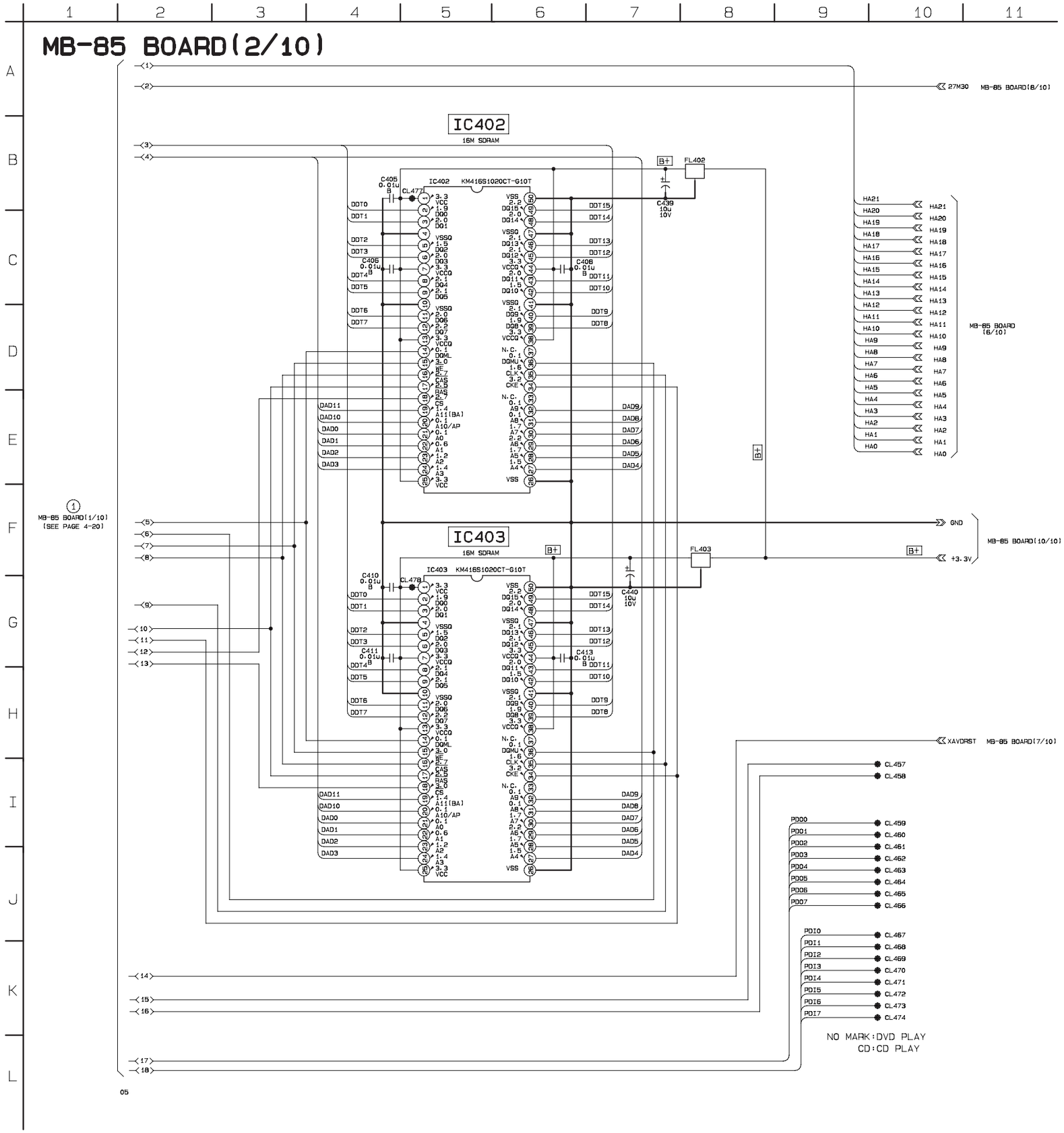
– Ref. No.: MB-85 board; 1,000 series –



AV DECODER
MB-85 (1/10)

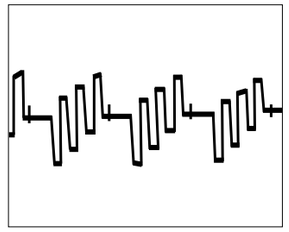
MB-85 (SDRAM) SCHEMATIC DIAGRAM **• See page 4-15 for printed wiring board.**

– Ref. No.: MB-85 board; 1,000 series –



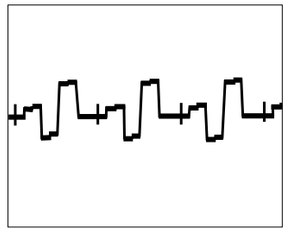
• Waveforms

❶ IC401 ㊹



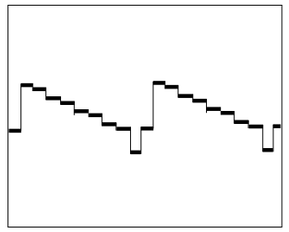
720 mVp-p (H)

❷ IC401 ㊼



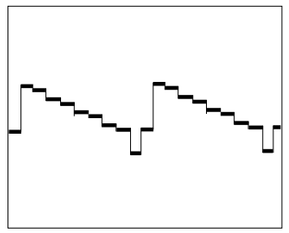
728 mVp-p (H)

❸ IC401 ㊽



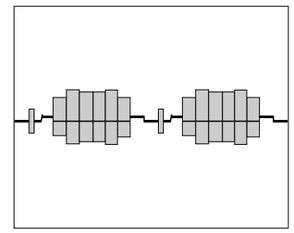
1.0 Vp-p (H)

❹ IC401 ㊶



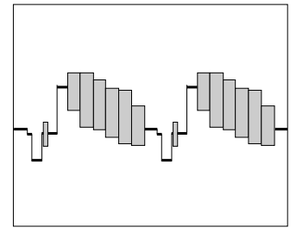
1.1 Vp-p (H)

❺ IC401 ㊷



816 mVp-p (H)

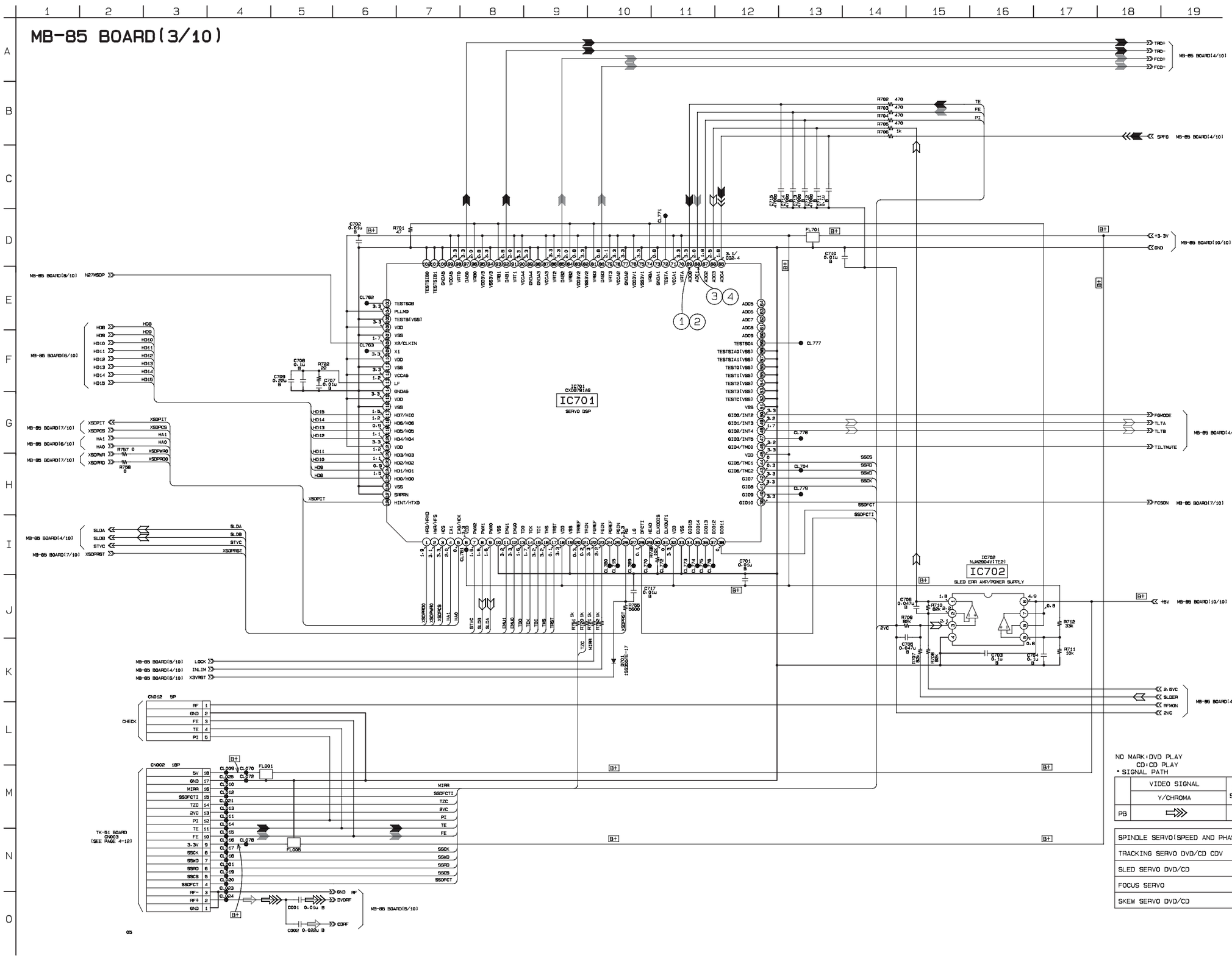
❻ IC401 ㊺



1.2 Vp-p (H)

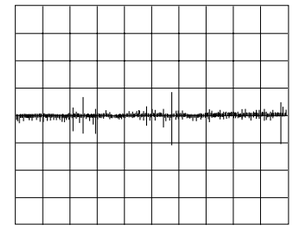
MB-85 (SERVO DSP) SCHEMATIC DIAGRAM • See page 4-15 for printed wiring board.

– Ref. No.: MB-85 board; 1,000 series –



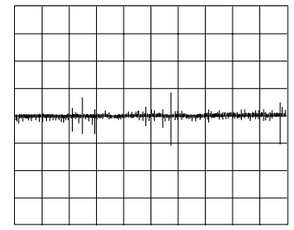
• **Waveforms**

❶ IC701 ⑥⑨ (DVD play)
500 mV/DIV 50 ms/DIV



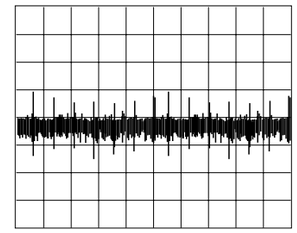
1.4 Vp-p

❷ IC701 ⑥⑨ (CD play)
500 mV/DIV 200 mV/DIV



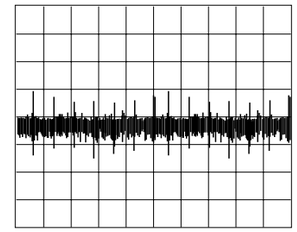
1.7 Vp-p

❸ IC701 ⑥⑧ (DVD play)
100 mV/DIV 5 ms/DIV



180 mVp-p

❹IC701⑥⑧ (CD play)
500 mV/DIV 50 ms/DIV

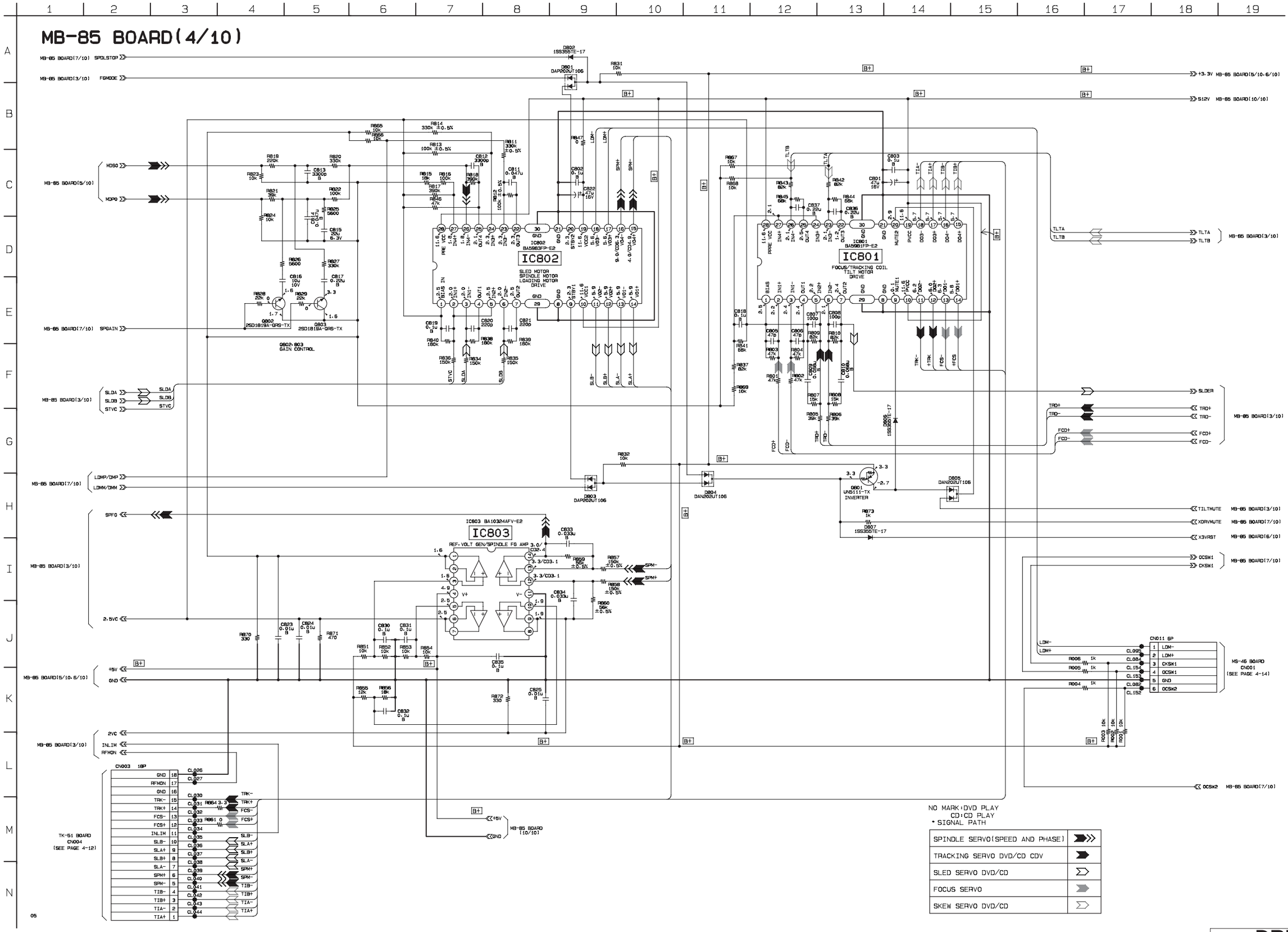


860 mVp-p

SERVO DSP
MB-85 (3/10)

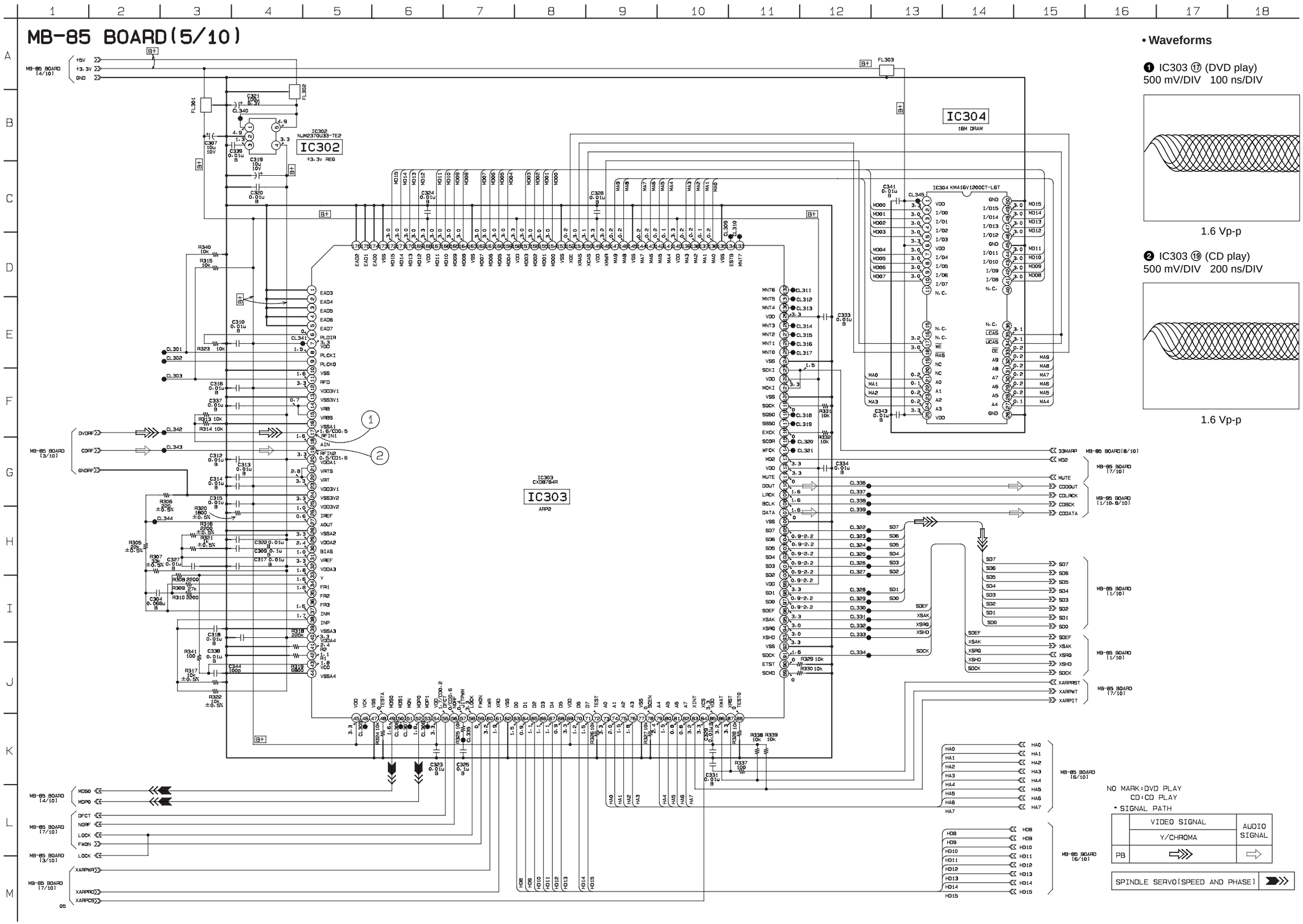
MB-85 (DRIVE) SCHEMATIC DIAGRAM **• See page 4-15 for printed wiring board.**

– Ref. No.: MB-85 board; 1,000 series –



MB-85 (ARP) SCHEMATIC DIAGRAM • See page 4-15 for printed wiring board.

– Ref. No.: MB-85 board; 1,000 series –



• **Waveforms**

❶ IC303 ⑰ (DVD play)
500 mV/DIV 100 ns/DIV

1.6 Vp-p

❷ IC303 ⑲ (CD play)
500 mV/DIV 200 ns/DIV

1.6 Vp-p

NO MARK:DVD PLAY
CD:CD PLAY

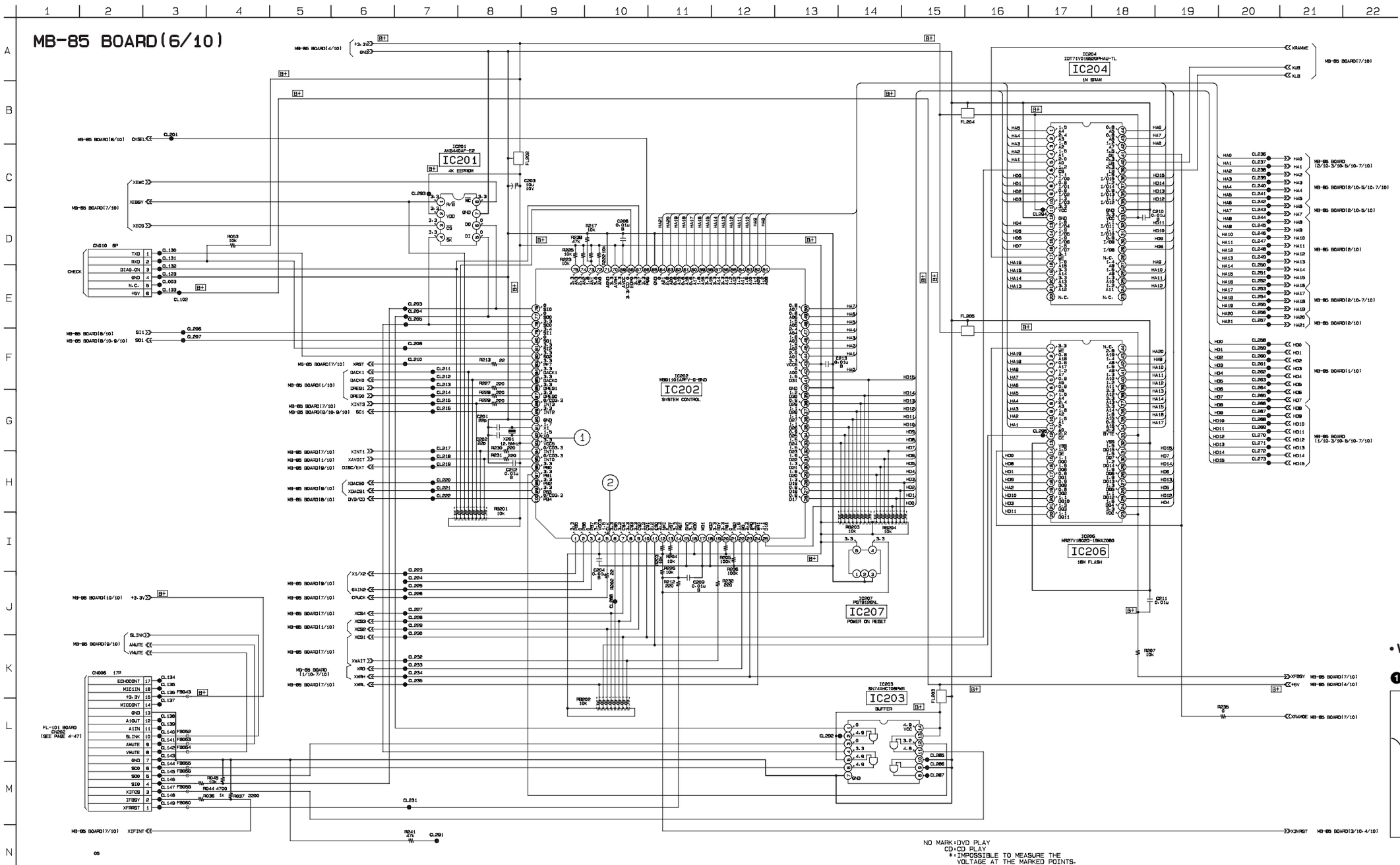
• SIGNAL PATH

	VIDEO SIGNAL	AUDIO SIGNAL
	Y/CHROMA	
PB	⇛	⇨

SPINDLE SERVO(SPEED AND PHASE) ⇛

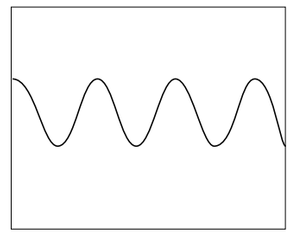
MB-85 (SYSTEM CONTROL) SCHEMATIC DIAGRAM • See page 4-15 for printed wiring board.

– Ref. No.: MB-85 board; 1,000 series –



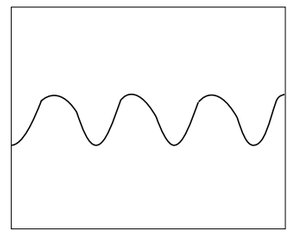
• **Waveforms**

❶ IC202 ⑨②



2.4 Vp-p (12.5 MHz)

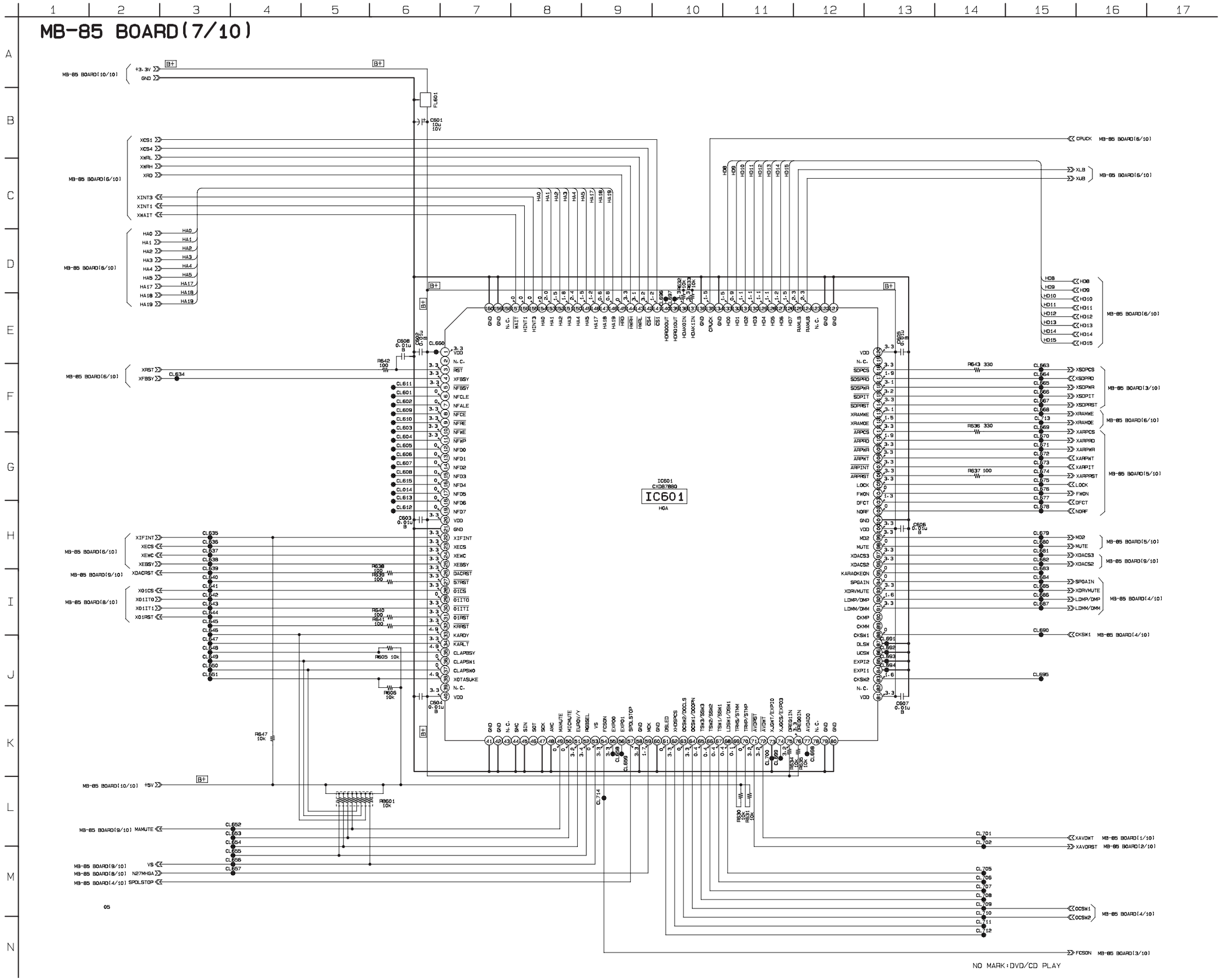
❷ IC202 ⑤



4 Vp-p (25.3 MHz)

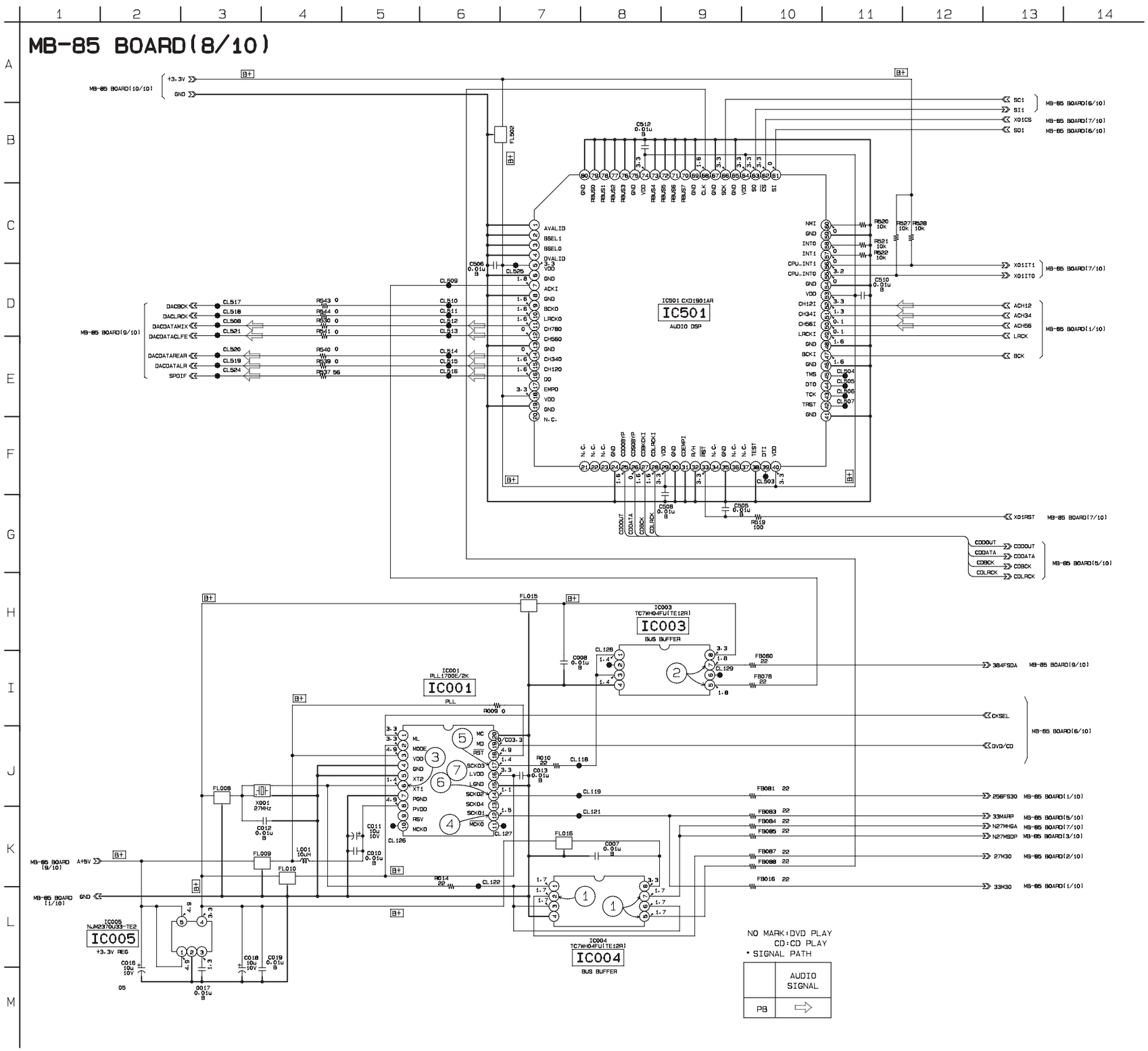
MB-85 (HGA) SCHEMATIC DIAGRAM **• See page 4-15 for printed wiring board.**

– Ref. No.: MB-85 board; 1,000 series –



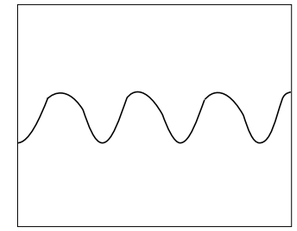
MB-85 (CLOCK GENERATOR, AUDIO DSP) SCHEMATIC DIAGRAM • See page 4-15 for printed wiring board.

– Ref. No.: MB-85 board; 1,000 series –



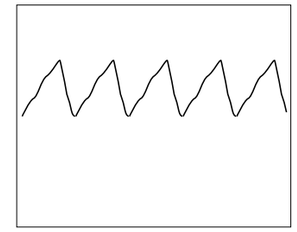
• **Waveforms**

❶ IC004 ②, ⑤, ⑦



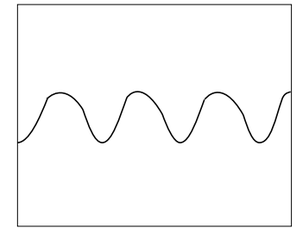
4.2 Vp-p (26.9 MHz)

❻ IC001 ⑭ (DVD play)



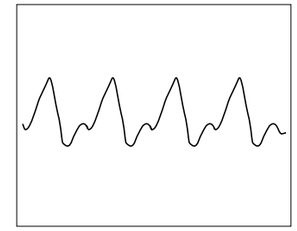
4.2 Vp-p (25.3 MHz)

❷ IC003 ⑤, ⑦



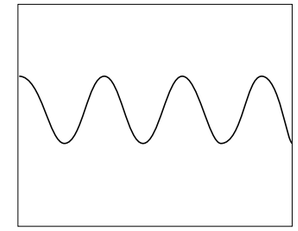
DVD: 6.2 Vp-p (37.0 MHz)
CD : 5 Vp-p (33.6 MHz)

❼ IC001 ⑭ (CD play)



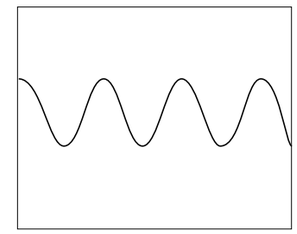
4.7 Vp-p (22.5 MHz)

❸ IC001 ⑥



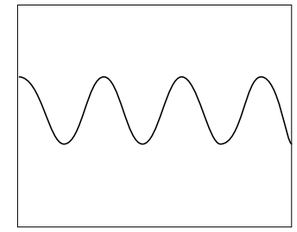
4.2 Vp-p (27.0 MHz)

❹ IC001 ⑫



4.6 Vp-p (33.8 MHz)

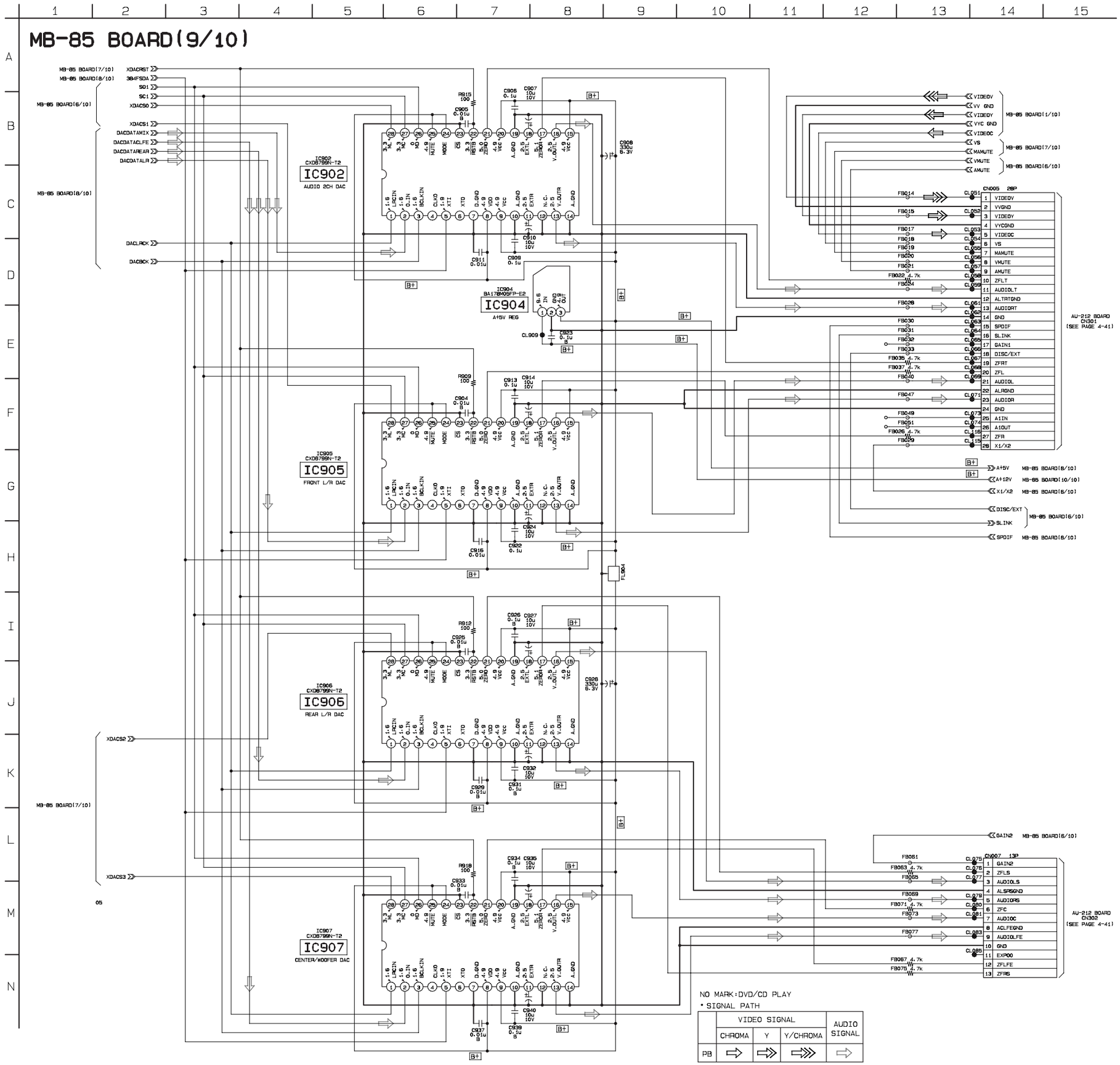
❺ IC001 ⑰



DVD: 5.8 Vp-p (36.5 MHz)
CD : 5.1 Vp-p (33.8 MHz)

MB-85 (DAC) SCHEMATIC DIAGRAM • See page 4-15 for printed wiring board.

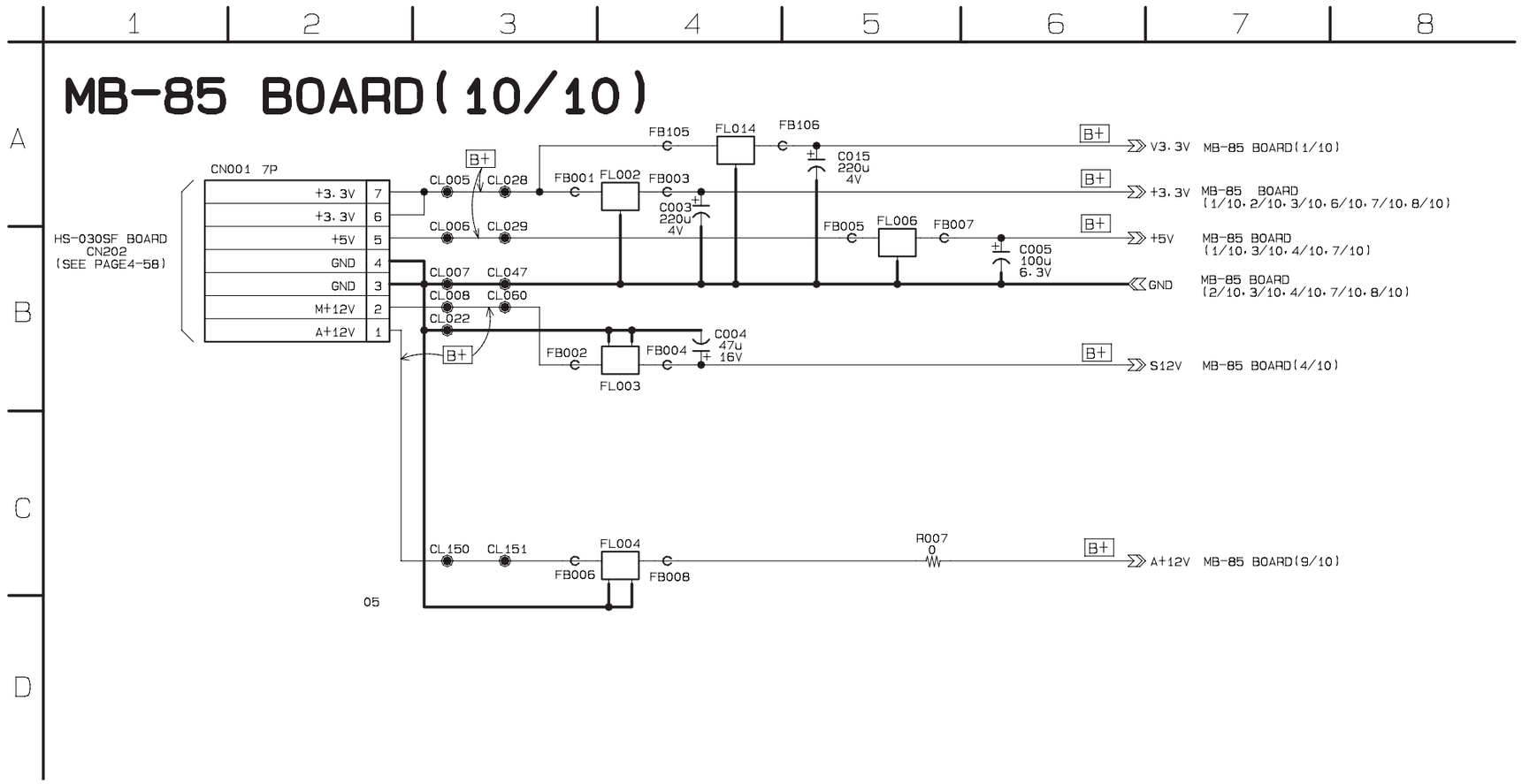
– Ref. No.: MB-85 board; 1,000 series –



DAC
MB-85 (9/10)

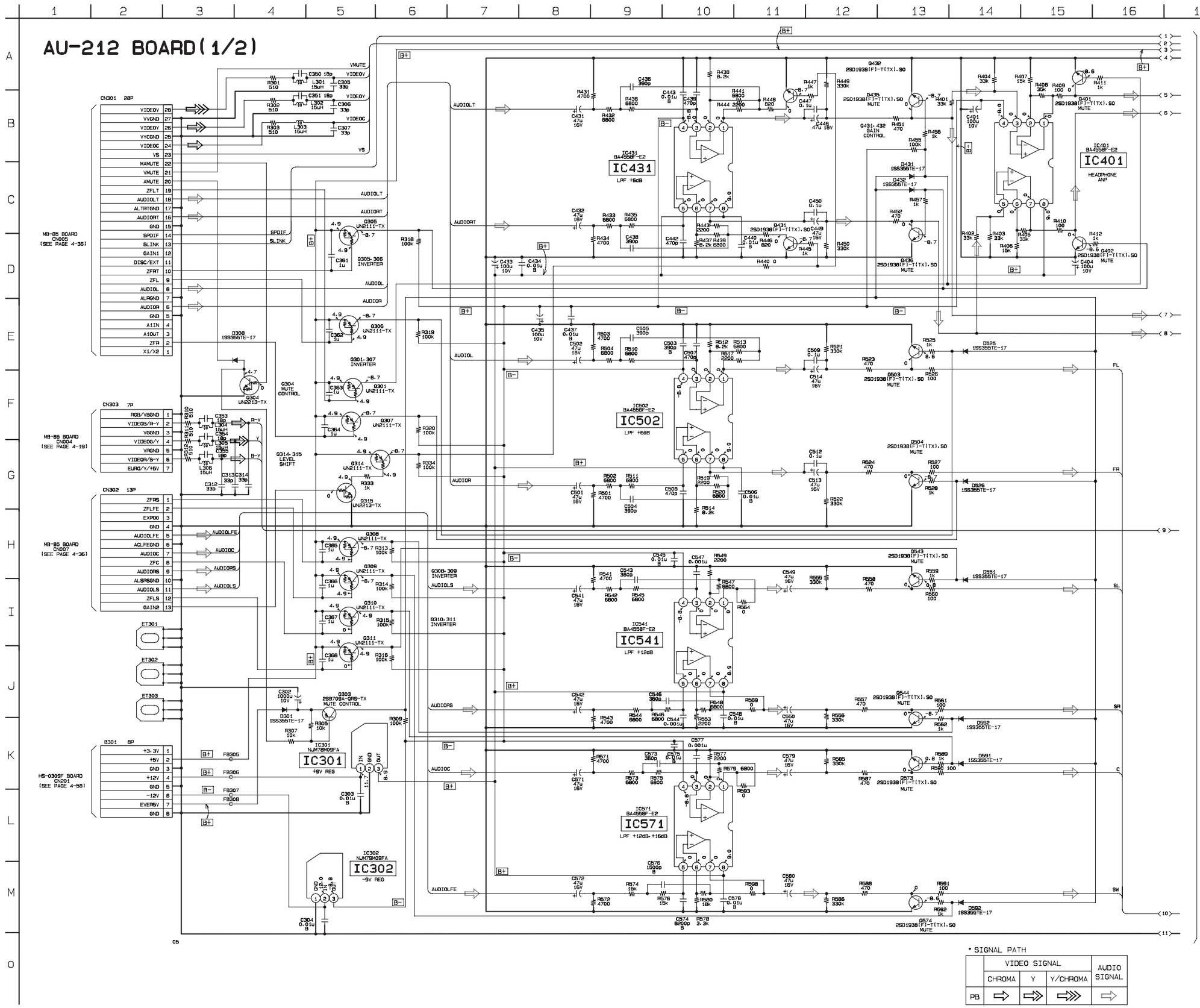
MB-85 (BIAS) SCHEMATIC DIAGRAM **• See page 4-15 for printed wiring board.**

– Ref. No.: MB-85 board; 1,000 series –



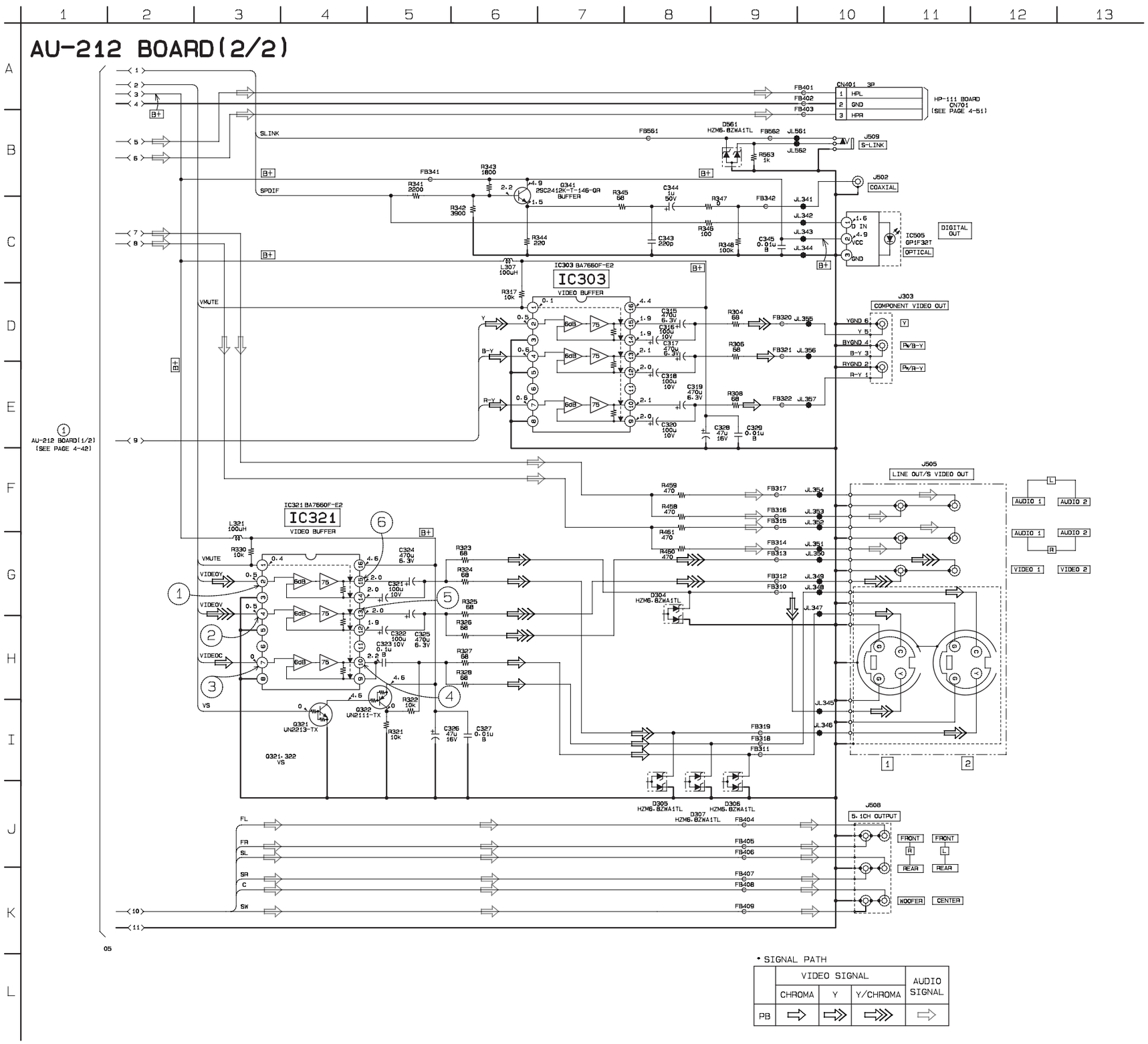
AU-212 (AUDIO) SCHEMATIC DIAGRAM

– Ref. No.: AU-212 board; 2,000 series –



AU-212 (VIDEO BUFFER) SCHEMATIC DIAGRAM • See page 4-39 for printed wiring board.

– Ref. No.: AU-212 board; 2,000 series –

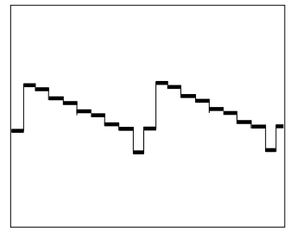


• SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
PB	⇨	⇨	⇨	⇨

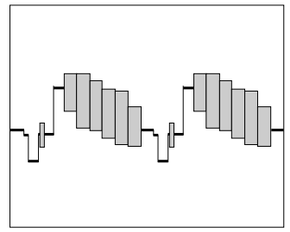
• Waveforms

❶ IC321 ②



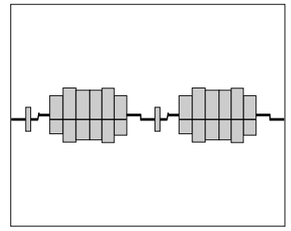
1.1 Vp-p (H)

❷ IC321 ④



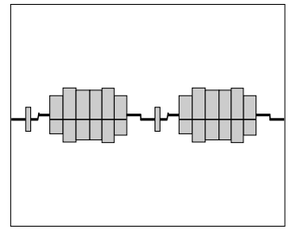
1.2 Vp-p (H)

❸ IC321 ⑦



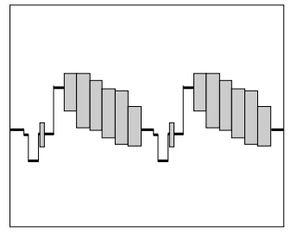
860 mVp-p (H)

❹ IC321 ⑩



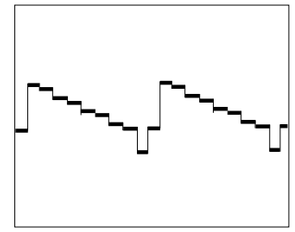
1.8 Vp-p(H)

❺ IC321 ⑬



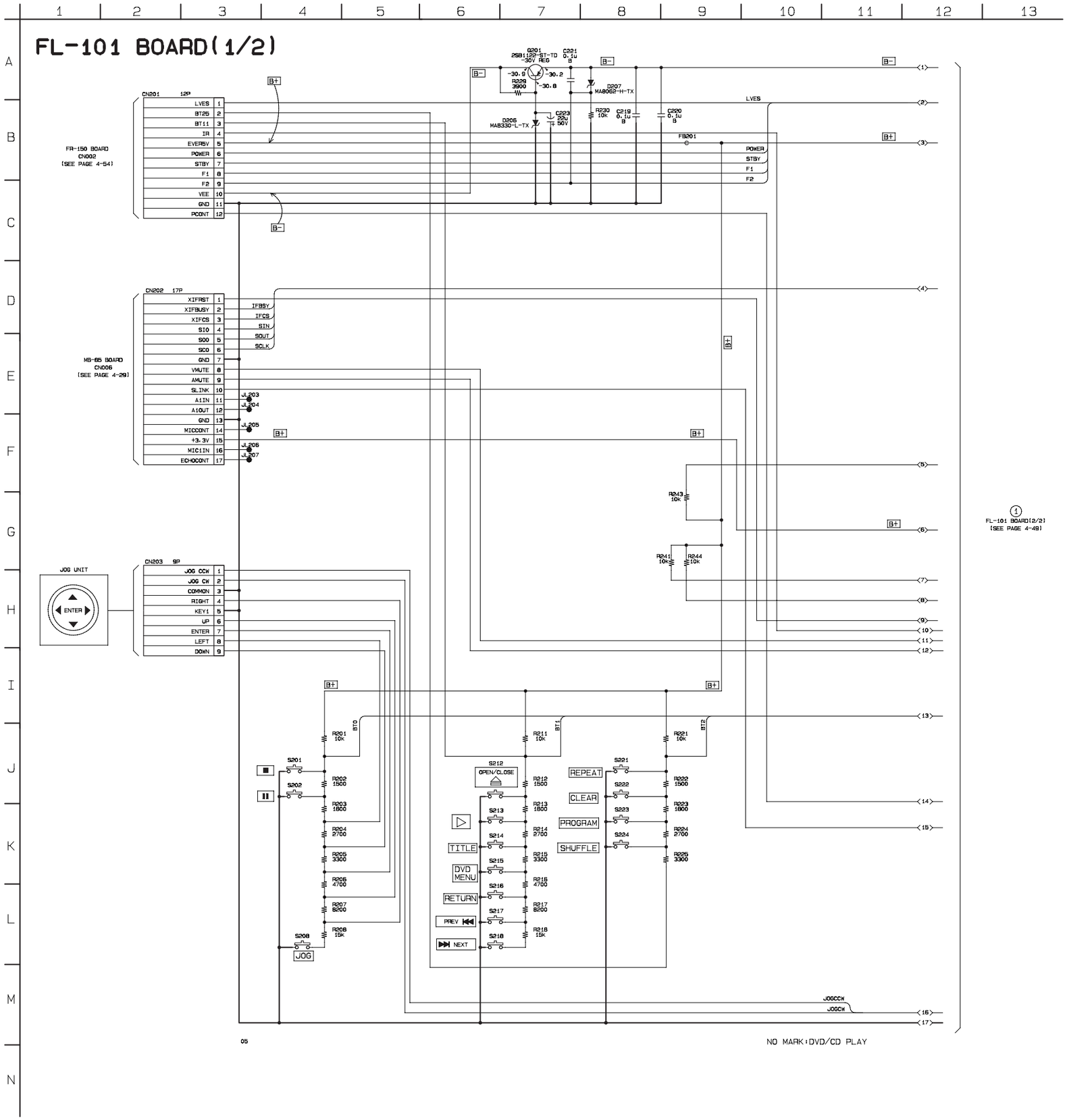
2.4 Vp-p (H)

❻ IC321 ⑮



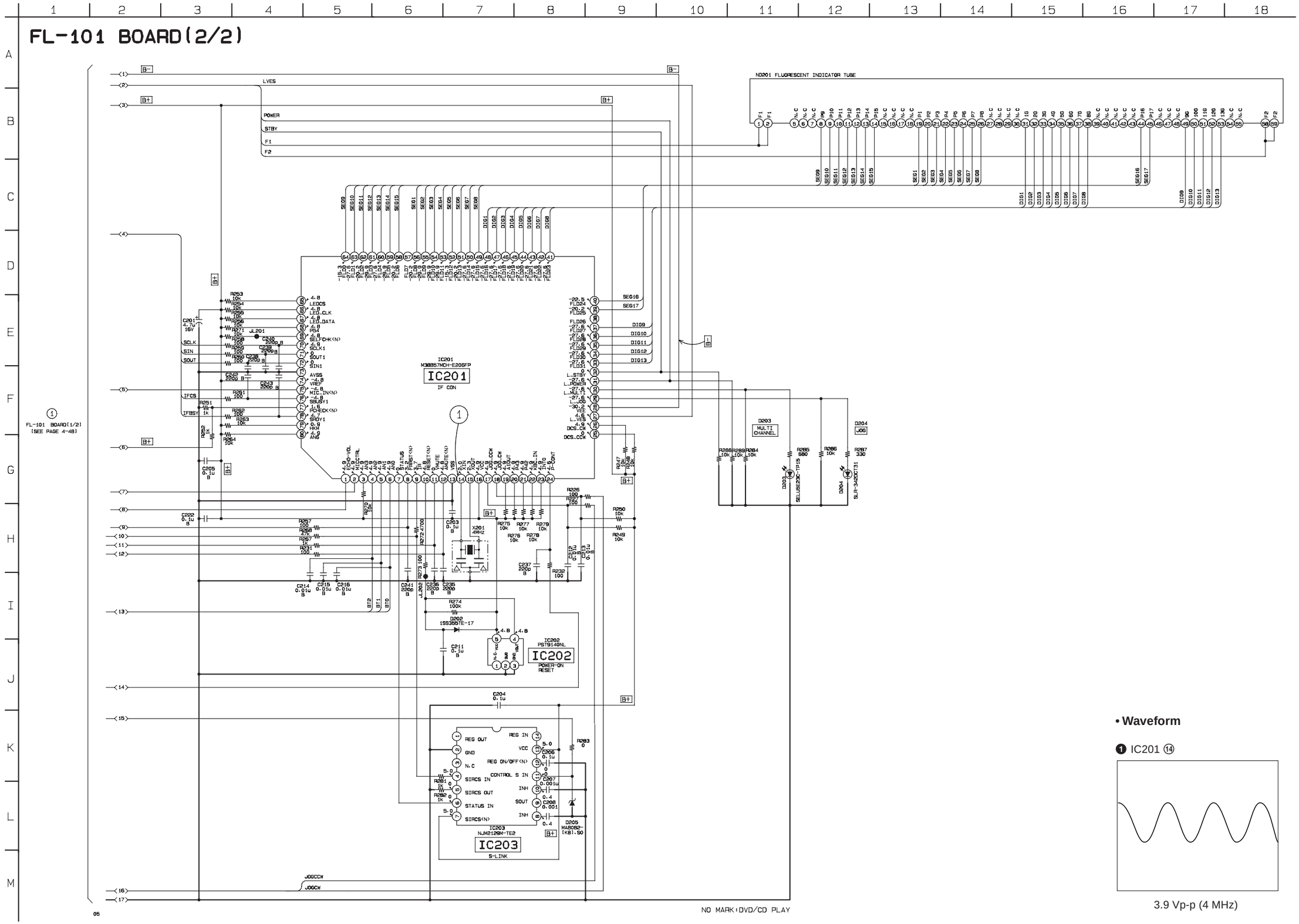
2.0 Vp-p (H)

FL-101 (FUNCTION SWITCH) SCHEMATIC DIAGRAM • See pages 4-45 for printed wiring board.
– Ref. No.: FL-101 board; 2,000 series –



FL-101 (IF CON) SCHEMATIC DIAGRAM **• See pages 4-45 for printed wiring board.**

– Ref. No.: FL-101 board; 2,000 series –



• **Waveform**

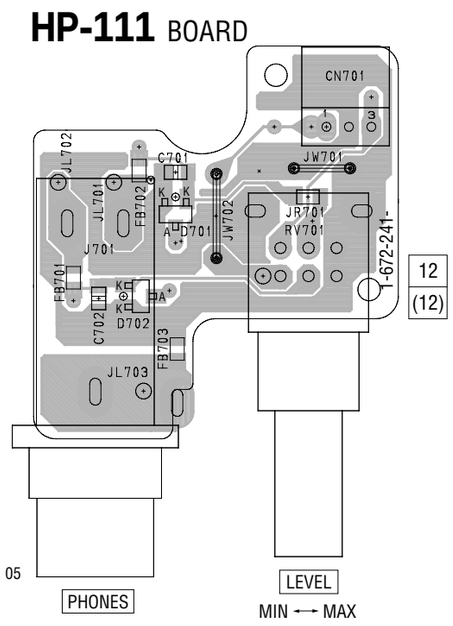
❶ IC201 ⑭

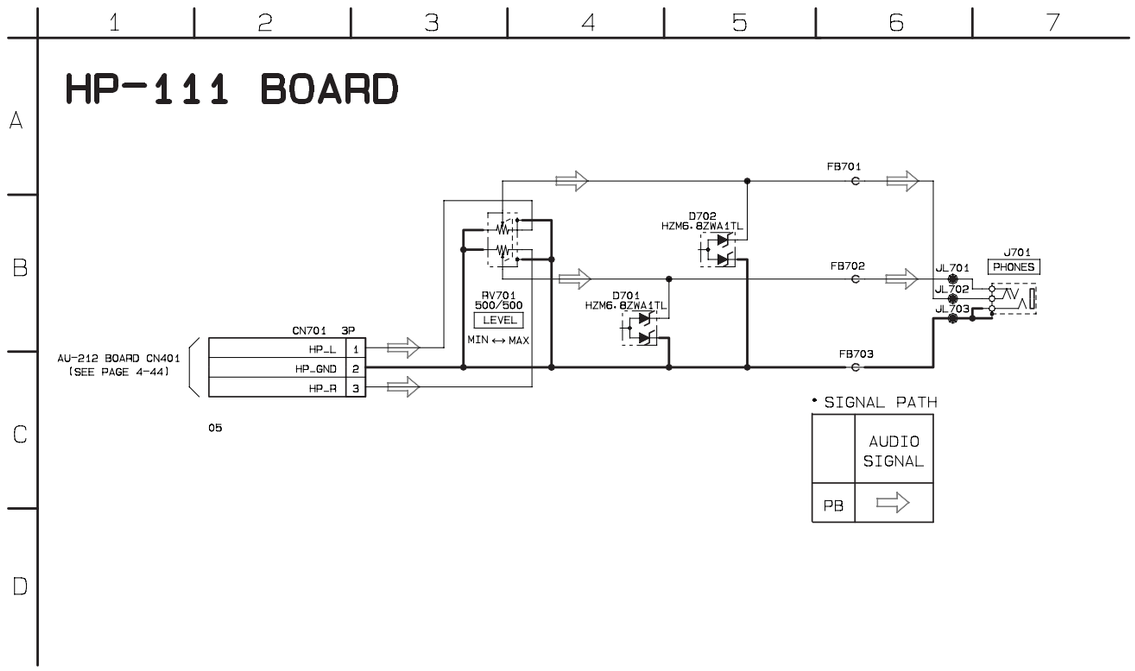
3.9 Vp-p (4 MHz)

HP-111 (HEADPHONE) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

– Ref. No.: HP-111 board; 2,000 series –

There are few cases that the part isn't mounted in this model is printed on this diagram.



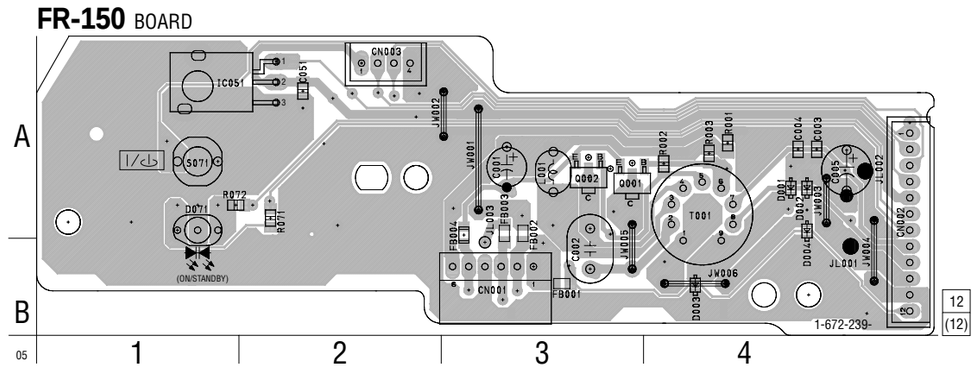


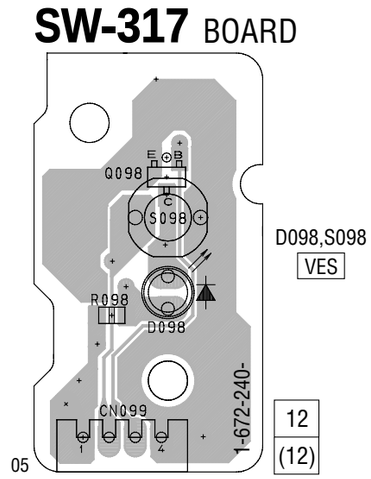
SW-317 (SURROUND SWITCH), FR-150 (IR/POWER SWITCH) PRINTED WIRING BOARDS

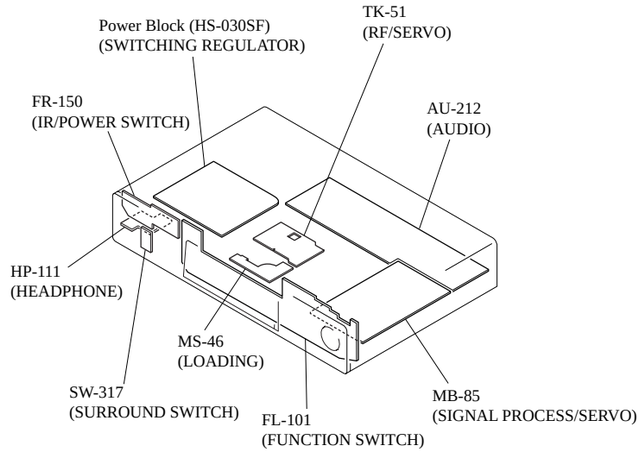
– Ref. No.: SW-317 board and FR-150 board; 4,000 series –

FR-150 BOARD

CN001	B-3
CN002	A-5
CN003	A-2
D001	A-4
D002	A-4
D003	B-4
D004	A-4
D071	A-1
IC051	A-1
Q001	A-3
Q002	A-3

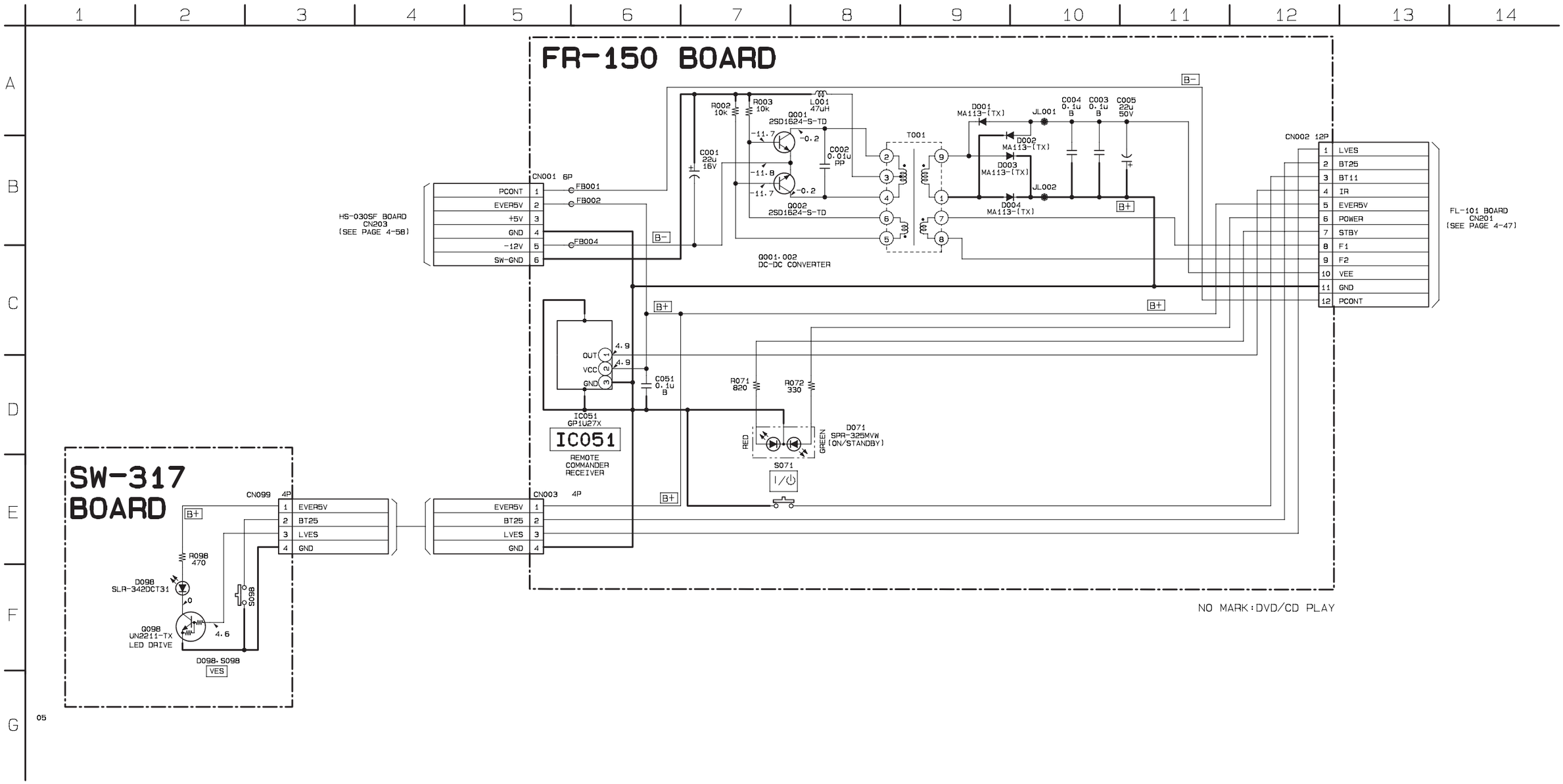






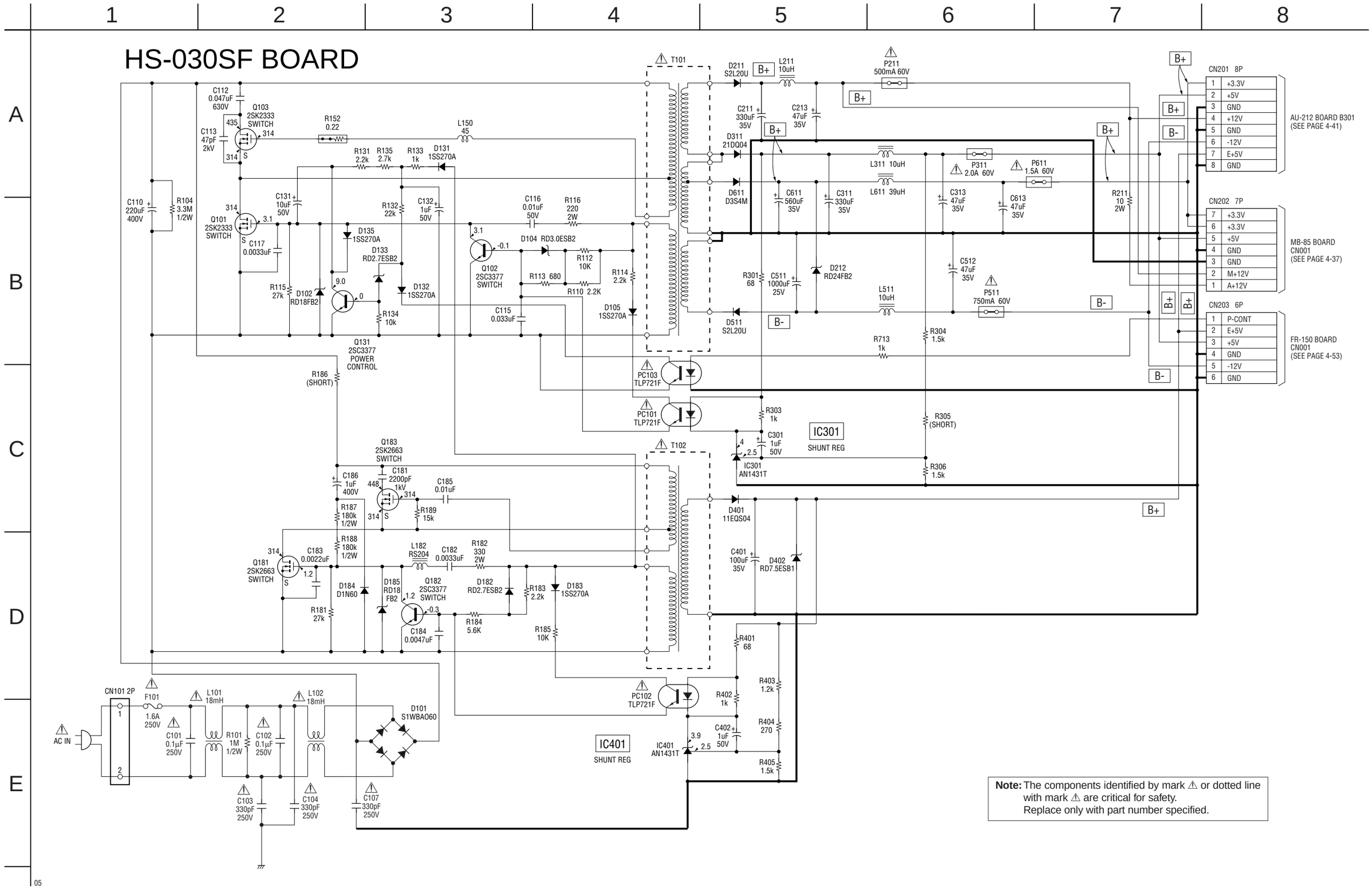
SW-317 (SURROUND SWITCH), FR-150 (IR/POWER SWITCH) SCHEMATIC DIAGRAM

– Ref. No.: SW-317 board and FR-150 board; 4,000 series –



HS-030SF (SWITCHING REGULATOR) SCHEMATIC DIAGRAM

– Ref. No.: HS-030SF board; 6,000 series –



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.